

Claims 1, 4, and 12-15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Berlin (U.S. Patent No. 5, 790, 297) in view of Applicant's Admitted Prior Art and Johary, et al. (U.S. Patent No. 5, 196, 839).

Claims 16 and 17 were allowed.

Applicants' response to objections to drawings and amendment to the specification:

The examiner has asserted that: (a) the drawings fail to comply with 37 CFR 1.84(p)(5) because they include reference signs not mentioned in the description; and (b) the amendment filed on 1/22/98 introduces new matter into the disclosure.

These objections to the drawings and amendment to the specification were previously asserted in Paper No. 8, dated 04/02/98, but were subsequently overcome by the applicants. The objections were then withdrawn in Paper No. 10, dated 07/10/98.

However, if the examiner intends to re-assert the objections to the drawings and amendment to the specification, applicants respectfully traverse these objections.

(a) Applicants' response to objections to drawings for failure to comply with 37

CFR 1.84(p)(5):

Applicants respectfully traverse the examiner's objections to the drawings. Revised FIG. 4, submitted with the amendment filed 1/22/98, does not include the reference signs "driver interface circuit" and "programmable gray-scale LCD 40." Moreover, the "driver interface circuit" and "programmable gray-scale LCD 40" are, in fact, mentioned in the description. On page 10, lines 1-7 of the specification as originally filed, the following reference is made to the "driver interface circuit": " ... SOS wafers 42 comprising the integrated drive control and pixel electrode circuitry. The drive control electronics may include circuitry to detect failure

conditions in the display, to calibrate the display gray-scale, or to switch to alternative pixel configurations for replacing defective pixels. The circuitry need not be identical on each of SOS wafers 42, but preferably includes common drive and interface circuitry.”

References to “programmable gray-scale LCD 40” are found in the specification as originally filed as follows:

1. In the title: **PROGRAMMABLE GRAY-SCALE LIQUID CRYSTAL DISPLAY**
2. On page 5, lines 8-10: “A **programmable gray-scale liquid crystal display** comprises a polarizer operably coupled to a beam of incident light to pass a beam of polarized light having a polarization axis.” (Emphasis added.)
3. On page 6, lines 5-7: “Another advantage is that a **plurality of liquid crystal** pixels are concatenated to form a **display having a gray-scale that is programmable** and fault-tolerant.” (Emphasis added.)
4. On page 9, lines 2-5: “Fig. 4 is a diagram of a fault tolerant, **programmable gray-scale LCD 40** of the present invention with silicon-on-sapphire (SOS) technology to provide the advantage of VLSI compatability.” (Emphasis added.)
5. On page 9, lines 24-25: “Fig. 5 is a flow chart of the process for fabricating **LCD 40.**” (Emphasis added.)
6. On page 10, lines 2-5: “The drive control electronics may include circuitry to detect failure conditions in the display, **to calibrate the display gray-scale**, or to switch to alternative pixel configurations for replacing defective pixels.” (Emphasis added.)

7. On page 12, lines 1-3: "Programming electronics 710 adjusts **programming voltages V_1 and V_2 to vary the gray-scale to a desired value** as measured by optical detector 708 for each pixel sequence of **LCD 40.**" (Emphasis added.)

(b) Applicants' response to objections to specification under 35 U.S.C. § 132:

The examiner's requirement to cancel material on the amendment filed 1/22/98, page 2, lines 1-11, is respectfully traversed. Applicants submit that "programmable gray-scale LCD 40" does not introduce new matter into the specification as originally filed. As stated in the above paragraph, support for "programmable gray-scale LCD 40" is found in the specification as originally filed.

Applicants' response to rejection of claims 1, 4, and 12-15 under 35 U.S.C. § 103(a):

Applicants respectfully traverse the § 103(a) rejection of claims 1, 4, and 12-15. Applicants submit that Berlin (U.S. Pat. No. 5, 790, 297), filed on Jun 27, 1997, is not a valid prior art reference since the subject application has a filing date of Aug 22, 1995.

Conclusion:

Accordingly, withdrawal of the objections to the drawings and amendment to the specification, withdrawal of the rejections of claims 1, 4, and 12-15, and allowance of the claims are requested.

Respectfully submitted,

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